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maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate rmation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE APR 2009	2 DEPORT TYPE			3. DATES COVERED <b>00-00-2009 to 00-00-2009</b>		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Air Force Service Procurement. Approaches for Measurement and Management				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Rand Corporation,1776 Main Street,PO Box 2138,Santa  Monica,CA,90407-2138				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	Same as Report (SAR)	8		

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Form Approved OMB No. 0704-0188

## **TESTIMONY**

## Air Force Service Procurement

# Approaches for Measurement and Management

LAURA H. BALDWIN

CT-328

April 2009

Testimony presented before the House Armed Services Committee Panel on Defense Acquisition Reform on April 23, 2009

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Published 2009 by the RAND Corporation
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## Laura H. Baldwin<sup>1</sup> The RAND Corporation

### Air Force Service Procurement Approaches for Measurement and Management<sup>2</sup>

#### Before the Committee on Armed Services Panel on Defense Acquisition Reform United States House of Representatives

#### April 23, 2009

Chairman and distinguished members: Thank you for inviting me to testify at this panel on "Measuring Value and Risk in Service Contracts." I am a senior economist at the RAND Corporation and currently serve as the Director of the Resource Management Program within Project AIR FORCE.

For more than a decade, RAND has conducted a broad portfolio of research on implementing best purchasing and supply management practices within the Department of Defense. My testimony today will describe research I co-led (along with my colleague John Ausink who is here today) that examined successful commercial practices for managing services acquisition and that focused on performance metrics to improve contract outcomes. That research was sponsored by the Air Force Deputy Assistant Secretary for Contracting (SAF/AQC) and conducted during fiscal year 2003.

Here I begin by providing some context for the research, followed by a discussion of what we did, what we found, and how it is relevant to the U.S. Air Force.

In terms of context, the Department of Defense purchases many services, including such commercial services as building maintenance, grounds-keeping, and janitorial services for its facilities and installations; such professional services as consulting and engineering support; and such weapon system-oriented services as research and development, test and evaluation, and maintenance and modification activities. Such services totaled nearly \$100 billion of DoD's budget at the time of this research.

<sup>2</sup> This testimony is available for free download at http://www.rand.org/pubs/testimonies/CT328/.

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Through the FY02-04 National Defense Authorization Acts, Congress required the DoD to take steps to change how it purchases services in order to decrease service costs, including broadly implementing performance-based services contracts based on measurable performance standards and a new management structure for services acquisitions.

As a result, the Air Force established a Program Executive Officer (PEO) for Combat and Mission Support (AFPEO/CM) who is responsible for management and oversight of a well-defined portfolio of Air Force services acquisition activities. This office is the single point of contact for Air Force services acquisition inquiries and is also responsible for developing long-range plans for cost-effective acquisition of services, including implementing performance-based contracts.

Turning now to the question of what we did, to monitor compliance with statutory requirements, respond to inquiries about specific acquisitions, and effectively manage Air Force services acquisition activities and organizations, the PEO for services (AFPEO/CM) needs information. RAND Project AIR FORCE was asked to develop a portfolio of "overarching" measures to allow the AFPEO/CM to assess the health of Air Force acquisition activities, diagnose problems, and target improvement efforts.

To develop this portfolio of metrics, we considered the experience of commercial firms. While we attended private-sector conferences on services acquisition practices and reviewed the business literature to gather data for our research, our findings are primarily based on a series of interviews with commercial-sector purchasing professionals who are respected by their peers for successfully creating and implementing what are widely accepted as best purchasing and supply management practices, focusing on their application to service acquisitions. These were considered to be emerging, state of the art practices in 2003.

The services discussed in our data sources are similar to commercial-like services purchased by the Air Force, including facilities services such as building maintenance, custodial services, and landscaping; telecommunications services such as computing, help desks, and call centers; and other support services such as human resources, consulting, and food services.

As for what we found, our primary finding is that commercial firms are shifting away from uncoordinated purchasing at lower levels of the organization and moving toward a corporate approach to managing their service acquisitions in much the same way as they acquire direct materials. Commercial firms are increasingly using commodity councils (which are centralized cross-functional teams) to develop organization-wide purchasing and supply management strategies for services; moreover, such firms are developing and using performance metrics,

similar to those used for goods, to manage their purchased services and their purchasing organizations that support those strategies. I will address each of these in turn.

When developing formal strategies for individual commodity groups, firms consider overarching corporate objectives (for example, increased market share or increased revenue), assessments of internal demands for services (such as the diversity of those demands and whether the service is provided one time only or on a continuing basis), characteristics of the purchased services (such as the consequence of poor performance), and markets for those services (for example, the market concentration). Because purchasing and supply management strategies have so many facets, commodity councils typically include representatives of user groups, experts in the particular service industry, and general experts in purchasing. Because of their importance to services procurement, industry experts, rather than procurement personnel, are often tapped to lead these commodity councils.

Commercial firms find it difficult to choose a portfolio of metrics that can inform decisionmaking, select appropriate performance thresholds, and populate the metrics with reliable data. Our interviewees recommended results-oriented metrics—both forward-looking and retrospective—that focus on how acquisition activities support both short-term and long term-corporate objectives to manage service acquisition activities. The most frequent results-oriented metrics include cost, quality, supplier satisfaction, implementation of new initiatives (such as supplier development), and special interest items (such as small business participation). Cost metrics were typically oriented toward measuring cost savings over time, often adjusting for exogenous market factors. Quality, which is more difficult to quantify for services than for goods, was typically measured in terms of user satisfaction or service reliability. Supplier satisfaction was used as a forward-looking indicator of whether the buying firm will be able to continue doing business with the best providers. This was measured primarily through surveys. Metrics for implementing new initiatives were a mixture of forward-looking process measures and retrospective outcome measures.

In addition to these results-oriented metrics, commercial firms indicated that metrics that track internal customer satisfaction, personnel training and retention, and ethics violations were also important to manage the internal purchasing organization. Internal customer satisfaction can be measured directly through surveys or indirectly through the amount of purchasing that falls outside corporate strategies. Training and retention measure building and retaining the high level of skills required to successfully manage services acquisition.

Developing a baseline for these metrics and then tracking them over time present challenges for many firms. Some have adopted new management information systems to collect and organize the data for their service acquisitions and have implemented surveys to collect additional data such as supplier satisfaction and customer satisfaction with purchased services, the purchasing organization, and its processes. Performance in selected areas such as cost, quality, and supplier satisfaction are regularly reported up to top-level executives.

An integrating theme is that commercial firms are using corporate objectives to align all parts of the purchasing process, from selection of the purchasing strategy, to selection of metrics, performance thresholds, purchasing organizational objectives, and personnel incentives. And like the corporate objectives, these are revisited over time to ensure that they remain relevant and effective.

As for how these findings are applicable to the Air Force, although the Air Force is not a commercial firm, it can learn from commercial firms' experiences in managing its own service acquisitions. Our findings recommend a balanced portfolio of performance metrics for the services PEO (AFPEO/CM), representing both short- and long-run considerations and internal and external activities. These recommendations are based on the six major categories of metrics discussed earlier: cost, quality, supplier satisfaction, new initiatives, special interest, and internal management.

As with commercial firms, the Air Force will find it challenging to populate these metrics. Some of the required data, such as contract costs, are in Air Force contracting data systems. But other RAND research has raised concerns about how useful these data are in determining what types of services were purchased through those contracts. At the time of this research, the Air Force did not have many of the required data, particularly supplier and customer satisfaction data, and would need to implement new data collection procedures to effectively implement these metrics. Given the cost of populating metrics with accurate data, the choice of metrics should be revisited over time to ensure that they remain useful and aligned with larger objectives.

More broadly, our analyses suggest that good metrics are necessary but not sufficient to extract maximum value from purchased services—that they are most powerful when implemented in a centralized management framework. We recommended the Air Force adopt a centralized, strategic approach linked to Air Force objectives for managing its purchased services. Given the diversity of Air Force service users and their requirements, we recommended the Air Force include each of the important user groups in the process of developing strategies for categories of services, as well as industry experts. If the Air Force has difficulty hiring such industry experts

from the private sector, the industry exchange program can be used to develop this kind of expertise over time. Finally, the Air Force will need to reinforce these efforts with leadership support and incentives that are aligned with Air Force objectives.

In summary, our research indicates that, like the Air Force, commercial firms were just beginning to pursue strategic, centralized management of their purchased services, and they based their approaches for services on their successful approaches for goods. Their experiences suggest that a multifaceted management approach—based on commodity councils, guided by a balanced set of performance metrics that reflect important dimensions of performance, and supported by leadership emphasis and incentives—can lead to improved service outcomes and greater value for Air Force buying organizations.

This concludes my remarks. Thank you, and I welcome any questions you might have.